

## A NEW GENUS AND SPECIES OF AUSTRALIAN DYTISCIDAE (COLEOPTERA)

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*Sekaliporus kriegi* is described from Northern Australia. The new genus and species resembles *Tiporus* Watts and *Antiporus* Sharp (Hydroporinae), but differs from these genera by characters of the humeral angles of the elytra, the postcoxal lines and male protarsi and genitalia.

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Among some *Antiporus* specimens sent to me recently from the Australian National Insect Collection, Canberra were a series of specimens from the Northern Territory that did not fit any known species of *Antiporus* Sharp nor the related *Tiporus* Watts (Watts 1978; 1985; Brancucci 1984). These specimens had the fourth segment of the male protarsi absent (or greatly reduced) and the evenly punctate metatibia characteristic of the *Barrethydrus/Antiporus/Tiporus* group of Hydroporinae. They lacked the pronounced elytral grooving of *Barrethydrus*. The males had the strongly asymmetrical expansion of the protarsi typical of *Tiporus* but they more closely resembled *Antiporus* in the shape of the humeral angle of the elytron and in having four-segmented protarsi. Further study revealed other characters not found in either *Antiporus* or *Tiporus* or in any other Hydroporinae. These specimens are described here as a new genus and species.

### *Sekaliporus* gen. nov.

A member of the Hydroporinae. Small, oblong oval, convex. Moderate to strong, even punctures throughout. Femora and tibiae punctate. Elytron with wide epipleura, narrowing progressively posteriorly, lateral edge of elytron and lateral edge of pronotum forming nearly continuous straight or slightly sinuate line in combination. Prothoracic process narrow, highly keeled, metacoxal lines well marked or even raised, close together, subparallel for most of their length. Midline of sternites appear somewhat raised or bulbous. Female with pro- and mesotarsi with very small fourth segment, well hidden in lobes of third segment. Male lacks sexual development of legs except for protarsi. Male protarsi with basal three segments markedly asymmetrical, posterior lobes

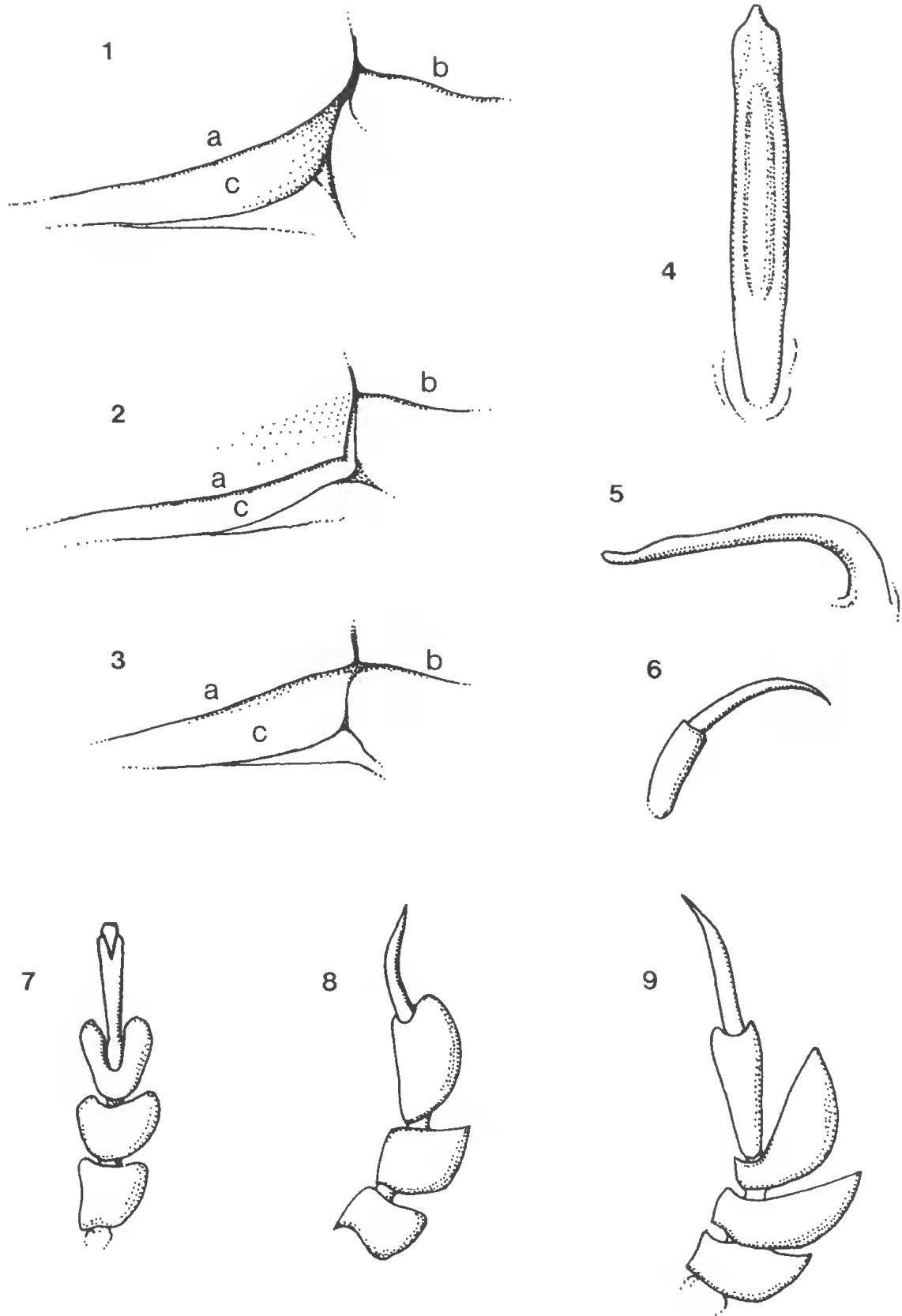
small, anterior lobes greatly expanded, seemingly lacking small fourth segment present in females. Single protarsal claw slender, elongate in only known species. Parameres flat, ribbon like, connect with basal piece of aedeagus only at anterior portion of aedeagus base.

### *Sekaliporus kriegi* sp. nov.

(See Figs 1–9)

#### *Description* (number examined, 19)

Length 3.1–3.8 mm. Oblong-oval, convex, elytron extended posteriorly by subapical spine. Nitid, dark red-brown to black, head lighter, pronotum laterally and band across middle diffusely lighter; in many specimens, elytron with one or two subbasal, diffusely lighter patches and one subapical one variable in size, tip usually lighter, appendages a little lighter. Head finely and sharply punctured, punctures less than diameter of eye facets, most separated by more than their diameters, finely reticulate. Pronotum with larger punctures, but still smaller than eye facet, separated by about their diameter on disc, closer laterally, tendency to form longitudinal lines along posterior edge, finely reticulate. Elytra punctured as on pronotum, weak tendency for punctures to form into longitudinal rows anteriorly, denser and stronger apically, virtually lacking reticulation. Elytron weakly margined, margin moderately serrate towards apex, margin produced into well marked broad triangular spine close to apex. Ventral surface strongly and densely rugose-punctate. Prothoracic process narrow, strongly bent in lateral view, strongly keeled, constricted slightly between procoxae, metathorax narrowly raised (viewed ventrally) in middle behind mesocoxae, raised portion grooved in mid-line. Postcoxal lines raised, particularly in anterior



FIGURES 1-9. 1, Lateral view of humeral angle region of *Antiporus*, a = lateral edge of elytron, b = lateral edge of pronotum, c = epipleura; 2, Ditto *Tiporus*; 3, Ditto *Sekaliporus*; 4, Dorsal view of aedeagus of *S. kriegi*; 5, Lateral view of aedeagus of *S. kriegi*; 6, Lateral view of male proclaw of *S. kriegi*; 7, Ventral view of male right protarsus of *Antiporus femoralis*; 8, Ventral view of male right protarsus of *Tiporus undecimmaculatus* (Clark); 9, Ventral view of male right protarsus of *Sekaliporus kriegi*.

third, close together, subparallel, converging slightly in front, diverging slightly behind. Midline of sternites somewhat bulbous.

#### Male

Protarsi four-segmented, basal three segments strongly asymmetrical, with posterior lobes reduced in size and anterior lobes greatly expanded. First and second segments subequal, third segment twice length of second, anterior lobe nearly as long as narrow un-lobed apical segment. Single claw long and thin, virtually straight except for strong basal curve.

#### Female

Protarsi five-segmented, three basal segments weakly expanded, segments one and two moderately asymmetrical, third segment weakly asymmetrical; two simple claws.

#### Distribution

Known only from the type localities in coastal Northern Territory and the Kimberley.

#### Types

Holotype: Male '12°23'S, 132°56'E, 7km NW by N of Mt Cahill Crossing, East Alligator River, N.T. 9.vi.73, Upton and Feehan', in ANIC.

Paratypes: 1, '12°46'S 132°39'E, 12km NNW of Mt Cahill, N.T. 20.v.73, Matthews & Upton', in ANIC; 3, '12°23'S 132°56'E, 7 km NW by N of Mt Cahill Crossing, East Alligator River, N.T. 9.vi.73 Upton and Feehan', in ANIC; 1, '13°03'S 132°19'E, South Alligator River, N.T. 46km WSW of Mt Cahill. 20.v.73, Matthews & Upton', in ANIC; 3, '12°22'S 133°01'E, 6 km SW by S of Oenpelli, N.T. 30.v.73, E.G. Matthews', in SAMA; 4, same data but at light, 2 in SAMA, 2 in ANIC; 1, 'McArthur River, N.T. 16°39'S 135°51'E 80 km SW of Borroloola, 13.v.73. M.S. Upton', in ANIC; 1, '16°31'S 125°16'E CALM site 25/1 Synnot CK W.A. 17–20 June 1988 T.A. Weir, at light open forest', in ANIC; 2, '12°50'S 132°51'E 16km E by N of Mt Cahill N.T. 13.vi.73 Upton of Feehan', in ANIC; 1, '12° 52'S 132°, S by E Koongarra N.T. 15 km E of Mt Cahill.

12.vi.73 Upton & Feehan', in ANIC; 1, '12°31'S 132°54'E 9km N by E of Mudginbarry HS, N.T. 26.v. 73 at light, Upton & McInnes', in ANIC.

#### Relationships

*Sekaliporus* clearly belongs close to *Antiporus* and *Tiporus*. In overall shape, colour and punctuation it quite closely resembles *T. josepheni*. It differs from both these genera by having the postcoxal lines very close together and almost parallel and in the shape of the humeral angle of the elytron. In *Sekaliporus* the epipleuron is sharply bent inwards to accommodate the profemur to the same extent as in *Tiporus* but the edge of the elytron is not also bent sharply as in *Tiporus* and to a lesser extent in *Antiporus*, but remains in the same line as the edge of the pronotum. The characters of the male also set *Sekaliporus* apart. Except for the protarsi, the legs of the males are simple in the only known species whereas in all known species of *Tiporus* and all but one *Antiporus*, the legs of the male are modified in some way. The male protarsi are unique. All three basal segments are grossly asymmetrically expanded, as in *Tiporus* but not *Antiporus*. The protarsi are four segmented as in *Antiporus*, in contrast to *Tiporus* which has only three segments and lacks the slender apical segment [the single claw arises from the third segment]. The parameres in both *Tiporus* and *Antiporus* are generally shortish and broad, often almost bulbous. In *Sekaliporus* they are noticeably more elongate and ribbon like and appear to be differently attached to the basal piece although this will need to be confirmed by careful dissection when more specimens become available.

#### ACKNOWLEDGMENTS

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